#include<stdio.h>

#include<conio.h>

#include<math.h>

int main()

{

int n,i,x[20],y[20],sumx=0,sumy=0,sumxy=0,sumx2=0;

float a,b;

clrscr();

printf("\n C program for Linear Curve Fitting \n ");

printf("\n Enter the value of number of terms n:");

scanf("%d",&n);

printf("\n Enter the values of x:\n");

for(i=0;i<=n-1;i++)

{

scanf(" %d",&x[i]);

}

printf("\n Enter the values of y:");

for(i=0;i<=n-1;i++)

{

scanf("%d",&y[i]);

}

for(i=0;i<=n-1;i++)

{

sumx=sumx +x[i];

sumx2=sumx2 +x[i]\*x[i];

sumy=sumy +y[i];

sumxy=sumxy +x[i]\*y[i];

}

a=((sumx2\*sumy -sumx\*sumxy)\*1.0/(n\*sumx2-sumx\*sumx)\*1.0);

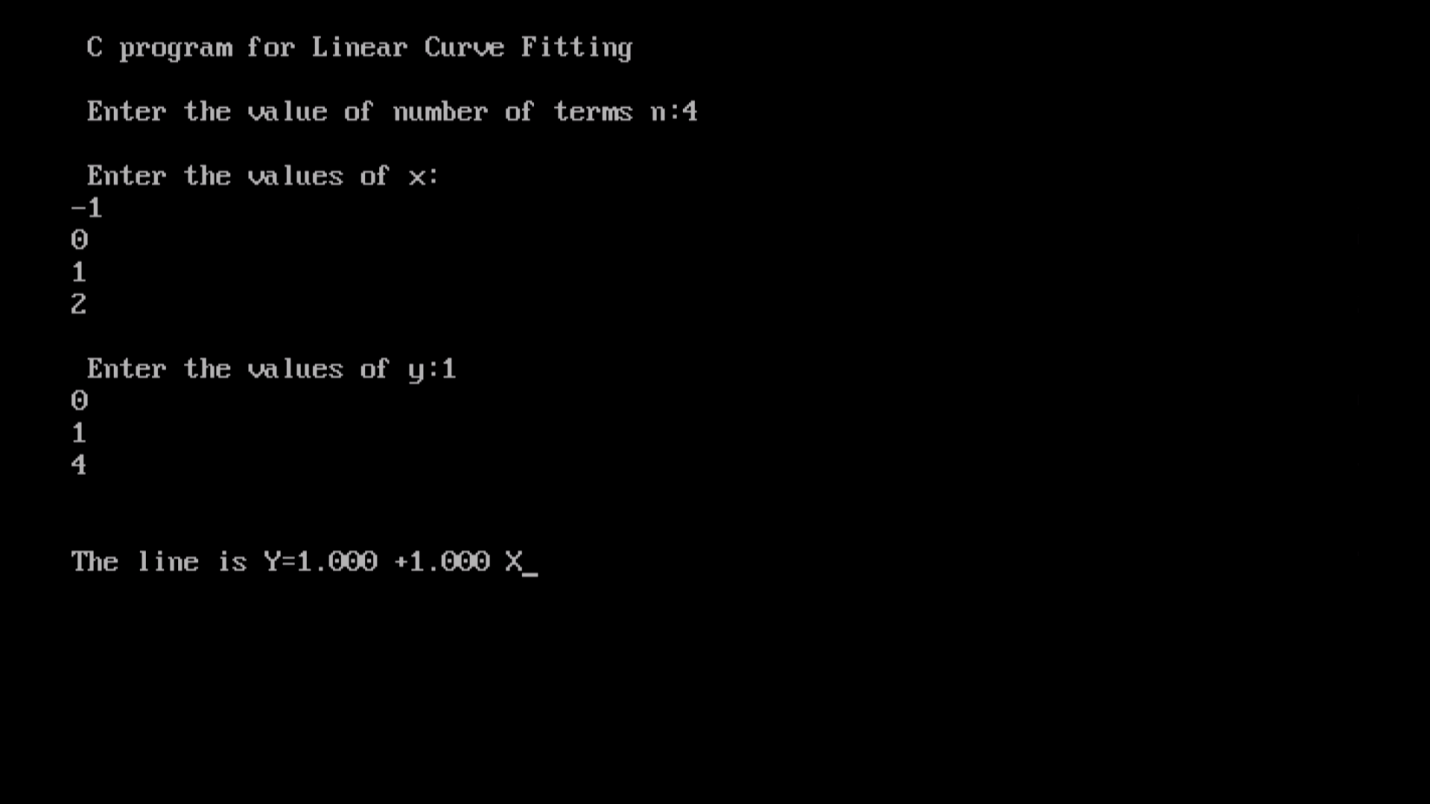
b=((n\*sumxy-sumx\*sumy)\*1.0/(n\*sumx2-sumx\*sumx)\*1.0);

printf("\n\nThe line is Y=%3.3f +%3.3f X",a,b);

getch();

return(0);

}

****